REMARKS

Claims 1-10 and 14-17 are pending in this application. By this Amendment, claim 2 is amended for clarity. Support for this amendment may be found in the present specification at, for example, page 7, lines 1-6. No new matter is added.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

II. Rejections under 35 U.S.C. §103(a)

The Office action rejects claims 1-6, 7, 14, 16 and 17 under 35 U.S.C. §103(a) over U.S. Patent No. 4,853,454 to Merger et al. ("Merger") in view of U.S. Patent No. 5,010,161 to Aoki et al. ("Aoki"); rejects claims 8 and 9 under 35 U.S.C. §103(a) over Merger in view of Aoki and further in view of U.S. Patent No. 3,935,274 to Jacobsen et al. ("Jacobsen"); rejects claim 10 over Merger in view of Aoki and further in view of U.S. Patent No. 3,835,191 to Wagner et al. ("Wagner"); and rejects claim 15 over Merger in view of Aoki and further in view of JP 07025976 ("JP '976"). Applicant respectfully traverses the rejections. Because the rejections are related, they are addressed together herein.

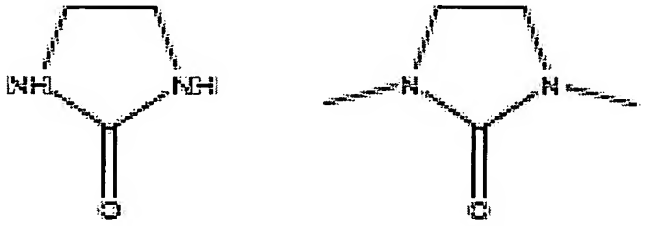
The Office Action asserts the Declaration under 37 C.F.R. §1.132 filed February 4, 2009 is insufficient to overcome the rejection of claims 1-17 because the data is not sufficient to show the unexpected nature of the property. See Office Action, page 4. Specifically, the Office Action asserts that Merger teaches the vapor pressure, and thus (1) the odor of the aldehyde is controlled by the molecular weight, (2) the decrease in odor as the molecular weight increases would have been expected by a person having ordinary skill in the art at the time of the invention, and (3) as the difference is merely a difference in degree rather than a difference in kind, the data is not sufficient to show the criticality of the claimed range. See Office Action, page 4. The reasoning of the Office Action is flawed and, thus, Applicant respectfully disagrees.

First, a discussion of results in terms of "differences in degree" as compared to "differences in kind" has very little meaning in a relevant legal sense. See *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) ("we generally consider a discussion of results in terms of 'differences in degree' as compared to 'differences in kind' . . . to have very little meaning in a relevant legal sense"). Thus, the Office Action's reasoning based on "differences in degree" as compared to "differences in kind" is irrelevant and does not support a finding that the data is not sufficient to show the criticality of the claimed range.

Second, smell is not directly correlated with vapor pressure as implied by the Office Action at page 6. Although, a molecule may not have any smell or olfactory activity unless it is volatile, just because a molecule is volatile (such as water molecule) does not necessarily mean the molecule can be smelled. Accordingly, the Office Action's assertion that a decrease in odor as the molecular weight increases would have been expected by a person having ordinary skill in the art at the time of the invention is a broad generalization that is not accurate. For example, the molecular weight of H_2O is about 18, but the molecule has no smell. Whereas H_2S has a molecular weight of about 34 (almost twice that of water), but the molecule possess extensive olfactory activity (smells like rotten eggs at very low concentrations). Thus, smell is not directly correlated with vapor pressure and molecules with substantially different atoms exhibit markedly different trends with respect to smell.

Here, the specific aldehyde of Merger to which the passage at page 8, lines 9-11 of Merger refers lacks an ester group and contains a urea group and, thus, is substantially different from the composition of claim 1. Therefore, because of the unpredictability in the art, one of ordinary skill in the art would not have reasonably expected that the properties of such different compounds would be related.

Specifically, the aldehyde that is being discussed at page 8, lines 9-11 of Merger contains a urea group. Ureas are generally known as having no smell, such as the following two low molecular weight ureas.

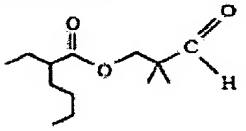
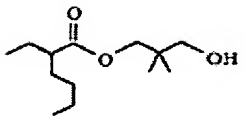
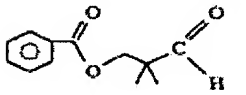
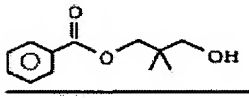


Furthermore, the aldehyde that is being discussed at page 8, lines 9-11 of Merger lacks any ester groups, which are well known to be olfactory active substances.

In contrast to the known properties of the above compounds, the aldimines of claim 1 have no smell despite the fact that these compounds have an aldehyde and an ester group. Both aldehydes and esters are well known to be olfactory active substances. For instance, certain aldehydes or esters are used in flavors and fragrances. See U.S. Patent No. 4,368,145 (attached) to Licciardillo et al. ("Licciardillo"), which discloses oxyalkanals (aldehyde esters) are known in the art of perfumery as well known perfume ingredients and, thus, would be expected to be olfactory active to a much higher degree than the compounds of Merger.

As a particular example of an olfactory active compound, Licciardillo discloses the same aldehyde as is disclosed by the applied reference, Aoki, and the intense smell associated with it. See Licciardillo, Table 1, col. 15, reproduced below for convenience.

TABLE I

Structure of Oxoalkyl Ester	Organoleptic Properties
	Ozoney, aldehydric, floral, green, spicy (coriander-like, cardamom-like, ginger-like).
	A fruity aroma.
	A honey, tobacco aroma with coumarin-like, and cumene-like notes.
	A fruity, woody aroma.

As seen in Table 1, similar to the aldehyde in Aoki, R^1 has seven carbon atoms. Licciardillo indicates that these compounds possess very intense olfactory characteristics and may be used at very low concentrations, such as 0.01% or even less (e.g. 0.005%). See Licciardillo, col. 15, lines, 55-68. Applicants respectfully submit that it would not have been predictable to one having ordinary skill in the art that the increase of 4 carbons in R^1 and the presence of an ester group (which is known to be an olfactory active functional group) yields a composition having no smell, such as aldimines of claim 1. Clearly, the smell properties of the claimed composition are unexpected and could not have been reliably predicted on the basis of chemical structure, in relation to the compounds of Merger, which only contain a urea group and lack an ester group.

Thus, in the presently claimed invention, the range of 11 to 30 carbon atoms in the alkyl chain achieves highly *unexpected results* of providing polyaldimines that are odorless, as compared to the compounds of, for example, Aoki (as evidenced by Licciardillo). See also the present specification at, for example, page 3, lines 10-14; page 4, lines 23-25; and page 20, Table 1; and the Declaration under 37 C.F.R. §1.132 filed February 4, 2009 where a variety of polyaldimines having R^1 groups *outside* of the presently claimed range do *not*

achieve these unexpected results. The unexpected ordorless nature of the compounds falling within this range provides superior properties in that they avoid causing "headaches, nausea or other health problems." See the present specification at page 1, lines 23-28.

Therefore, the compounds of Aoki (as evidenced by Licciardillo), the various examples in the Declaration under 37 C.F.R. §1.132 filed February 4, 2009, and the comparative examples shown in Table 1, on page 20 of the present specification, do not achieve these unexpected results although the compounds of Aoki as evidenced by Licciardillo, Table 1, col. 15, examples in the Declaration under 37 C.F.R. §1.132 filed February 4, 2009 and comparative examples fall within the range taught by Aoki, but are outside of the presently claimed range. Therefore, the presently claimed range is critical and the results observed for the compositions of the present claims could not be reliably predicted on the basis of chemical structure because the unexpected results are *only* achieved within the presently claimed range.

Accordingly, for at least the above reasons, Applicants respectfully submit that the applied references would not have rendered obvious the presently claimed invention, at least because the presently claimed invention displays highly *unexpected results* with respect to the *critical range* of R^1 being "a linear or branched alkyl chain having 11 to 30 carbon atoms."

Therefore, the presently claimed range would not have been obvious over Aoki for at least the reasons discussed above. Furthermore, none of the other applied references cure this deficiency. The Office Action admits that Merger does not teach the compound having formula B, and the secondary references are applied by the Office Action merely with regard to various features of dependant claims 2-10 and 14-17. Therefore, Merger, Aoki, Jacobsen, Wagner and JP '976, individually or in combination, fail to teach or suggest each and every feature of claim 1.

Accordingly, independent claim 1 would not have been obvious over the applied references for at least the reasons discussed above. Dependent claims 2-10 and 14-17 therefore also would not have been obvious for at least the reason that independent claim 1 would not have been obvious.

Reconsideration and withdrawal of the rejection are respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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JAO:BSP

Attachment:
U.S. Patent No. 4,368,145

Date: July 2, 2009

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